

AWARD/CONTRACT		1. This Contract Is A Rated Order Under DPAS (15 CFR 700)		Rating DOA4		Page 1 Of 26	
2. Contract (Proc. Inst. Ident) No. W56HZV-07-C-0211		3. Effective Date 2007APR24		4. Requisition/Purchase Request/Project No. SEE SCHEDULE			
5. Issued By U.S. ARMY TACOM LCMC AMSTA-AQ-ABGD DAVID E. MCCRIGHT (586)574-7625 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL e-mail address: MCCRIGHD@TACOM.ARMY.MIL		Code W56HZV		6. Administered By (If Other Than Item 5) DCMA DAYTON AREA C, BUILDING 30 1725 VAN PATTON AVENUE WRIGHT PATTERSON AFB, OH 45433-5302 SCD C PAS NONE ADP PT HQ0337		Code S3605A	
7. Name And Address Of Contractor (No. Street, City, County, State, And Zip Code) ASHLAND INC DBA: VALVOLINE 50 E RIVERCENTER BLVD COVINGTON, KY 41011-1683 TYPE BUSINESS: Large Business Performing in U.S.				8. Delivery <input type="checkbox"/> FOB Origin <input checked="" type="checkbox"/> Other (See Below)			
				9. Discount For Prompt Payment			
				10. Submit Invoices (4 Copies Unless Otherwise Specified)		Item 12	
Code 4NK87 Facility Code				To The Address Shown In:			
11. Ship To/Mark For SEE SCHEDULE		Code		12. Payment Will Be Made By DFAS - COLUMBUS CENTER DFAS-CO/NORTH ENTITLEMENT OPERATION P.O. BOX 182266 COLUMBUS OH 43218-2266		Code HQ0337	
13. Authority For Using Other Than Full And Open Competition: <input checked="" type="checkbox"/> 10 U.S.C. 2304(c)(1) <input checked="" type="checkbox"/> 41 U.S.C. 253(c)(1)				14. Accounting And Appropriation Data ACRN: AA 21 62040000066N6N7EP622601255Y S20113 W56HZV			
15A. Item No. SEE SCHEDULE		15B. Schedule Of Supplies/Services CONTRACT TYPE: Cost-Plus-Fixed-Fee		15C. Quantity		15D. Unit	
				15E. Unit Price		15F. Amount	
				KIND OF CONTRACT: Research and Development Contracts			
15G. Total Amount Of Contract						\$833,543.00	
16. Table Of Contents							
(X)	Section	Description	Page(s)	(X)	Section	Description	Page(s)
Part I - The Schedule				Part II - Contract Clauses			
X	A	Solicitation/Contract Form	1	X	I	Contract Clauses	17
X	B	Supplies or Services and Prices/Costs	2	Part III - List Of Documents, Exhibits, And Other Attachments			
X	C	Description/Specs./Work Statement	5	X	J	List of Attachments	26
X	D	Packaging and Marking	9	Part IV - Representations And Instructions			
X	E	Inspection and Acceptance	11		K	Representations, Certifications, and Other Statements of Offerors	
X	F	Deliveries or Performance	12				
X	G	Contract Administration Data	13		L	Instrs., Conds., and Notices to Offerors	
X	H	Special Contract Requirements	15		M	Evaluation Factors for Award	
Contracting Officer Will Complete Item 17 Or 18 As Applicable							
17. <input type="checkbox"/> Contractor's Negotiated Agreement (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)				18. <input checked="" type="checkbox"/> Award (Contractor is not required to sign this document.) Your offer on Solicitation Number W56HZV06R0761 including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.			
19A. Name And Title Of Signer (Type Or Print)				20A. Name Of Contracting Officer MICHAEL L. CIONI CIONIM@TACOM.ARMY.MIL (586)574-7070			
19B. Name of Contractor By _____ (Signature of person authorized to sign)		19c. Date Signed		20B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer)		20C. Date Signed 2007APR24	

Name of Offeror or Contractor: ASHLAND INC

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	<p>SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS</p> <p><u>NANOPARTICLES RESEARCH & DEVELOPMENT</u></p> <p>NOUN: SERVICES LINE ITEM SECURITY CLASS: Unclassified</p> <p>Contractor shall furnish all the supplies and services to accomplish the task specified in Section C Scope of Work.</p> <p>(End of narrative B001)</p> <p>Contractor shall furnish all the supplies and services to accomplish the task specified in Section C Scope of Work.</p> <p>Est. Cost: \$793,850.00 Fixed Fee: <u>39,693.00</u> Total Amount: \$833,543.00</p> <p>(End of narrative B002)</p>		LO		
0001AA	<p><u>NANOPARTICLES RESEARCH AND DEVELOPMENT</u></p> <p>NOUN: SERVICES LINE ITEM PRON: R362C353R3 PRON AMD: 01 ACRN: AA AMS CD: 622601T2600</p> <p>Contractor shall furnish all the supplies and services to accomplish the task specified in Section C Scope of Work.</p> <p>(End of narrative B001)</p> <p><u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination</p> <p><u>Deliveries or Performance</u> DLVR SCH REL CD QUANTITY DATE 001 0 SEE SECTION F</p> <p>\$ 833,543.00</p>		LO		\$ <u>833,543.00</u>

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 3 of 26
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Name of Offeror or Contractor: ASHLAND INC

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	<u>CONTRACTOR REPORTS</u> NOUN: DATA ITEM SECURITY CLASS: Unclassified <u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination		LO	\$ ** NSP **	\$ ** NSP **
0003	<u>CONTRACTOR MANPOWER REPORT</u> NOUN: DATA ITEM SECURITY CLASS: Unclassified The contractor shall provide the information required by the Contract Clause entitled CONTRACT MANPOWER REPORTING (CMR), TACOM Clause 52.237-4000, reference C-2. Unit Identification Code (UIC):W4GGAA (End of narrative B001) The contractor shall provide the information required by the Contract Clause entitled CONTRACT MANPOWER REPORTING (CMR), TACOM Clause 52.237-4000, reference C-2. Unit Identification Code (UIC):W4GGAA (End of narrative B002) <u>Inspection and Acceptance</u> INSPECTION: Destination ACCEPTANCE: Destination		LO	\$ ** NSP **	\$ ** NSP **

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 4 of 26
Name of Offeror or Contractor: ASHLAND INC		

B.1 Estimated Cost and Payment

B.1.1 The ESTIMATED COST for performance of the work required under this contract is stated in Section B under CLIN 0001, which shall constitute the estimated cost for the purpose of the Contract Clause hereof entitled LIMITATION OF FUNDS.

B.1.2 The contractor will be paid for the fixed fee stated in Section B under CLIN 0001 for the performance of work under the contract and in accordance with the terms of the Contract Clause entitled FIXED FEE, (Mar 1997), FAR 52.216-8. The fixed fee together with the reimbursement of cost shall constitute full and complete consideration for the contractor's service in connection with the work required and performed under this contract.

B.1.3 Allowable cost shall be determined, and payment thereof shall be provided, in accordance with the Contract Clause hereof entitled ALLOWABLE COST AND PAYMENT.

B.2 Payment

The contractor may submit public vouchers every two weeks for payment under this contract. The fee will be payable at the time of reimbursement of cost at the same rate to such cost as the total fee of this contract bears to the total estimated cost thereof, subject to any withholding pursuant to provisions of this contract.

B.3 Funds Allotted. The amount of funds currently allotted to this contract is \$833,543.00.

B.4 G&A and Labor Overhead Rate

B.4.1 G&A Rate- Under this contract, the contractor will not be reimbursed for G&A costs in excess of 9.80% of total costs. If the actual G&A rate is lower than 9.80%, the actual rate will be used. If the actual G&A rate is higher than 9.80%, the contractor will be compensated for G&A costs at a rate of 9.80%. If the DCAA actual cost audit determines a G&A rate for a fiscal year that is higher than 9.80%, the higher rate may be used only if the total G&A rate of the entire contract is 9.80% or lower. For example, if the actual rate for the first contractor fiscal year is lower than 9.80%, the compensation rate for the second contractor fiscal year may exceed 9.80% if appropriate, as long as the overall effective rate for the life of the contract does not exceed 9.80%

B.4.2 Labor Overhead Rate - Under this contract, the contractor will not be reimbursed for labor overhead costs in excess of 175.30% of direct labor costs. If the actual labor overhead rate is lower than 175.30%, the actual rate will be used. If the actual labor overhead rate is higher than 175.30%, the contractor will be compensated for labor overhead costs at a rate of 175.30%. If the DCAA actual cost audit determines a labor overhead rate for a fiscal year that is higher than 175.30%, the higher rate may be used only if the total labor overhead rate of the entire contract is 175.30% or lower. For example, if the actual rate for the first contractor fiscal year is lower than 175.30%, the compensation rate for the second contractor fiscal year may exceed 175.30% if appropriate, as long as the overall effective rate for the life of the contract does not exceed 175.30%

*** END OF NARRATIVE B 0001 ***

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 5 of 26
Name of Offeror or Contractor: ASHLAND INC		

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
C-1	52.204-4003 (TACOM)	START OF WORK MEETING	MAY/2000

The contractor shall host a start of work meeting at its facility, unless some other location is designated in the contract, within 30 days after contract award. The contractor shall at a minimum invite the Contracting Officer's Representative (COR) identified in Section G or in an appointment letter, the Contract Specialist identified on the face page of this document, and the Administrative Contracting Officer (ACO). The COR, Contract Specialist, and ACO shall be given at least 14 days advance notice of the time, date, and location of the start of work meeting. The preferred method of notification is by email.

[End of Clause]

C-2	52.237-4000 (TACOM)	CONTRACTOR MANPOWER REPORTING (CMR)	FEB/2007
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The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the contractor will report ALL contractor manpower (including subcontractor manpower) required for performance of this contract. The contractor is required to completely fill in all the information in the format using the following web address: <https://cmra.army.mil> . The required information includes the following:

- (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative;
- (2) Contract number, including task and delivery order number;
- (3) Beginning and ending dates covered by reporting period;
- (4) Contractor name, address, phone number, e-mail address, identity of contractor employee entering data;
- (5) Estimated direct labor hours (including sub-contractors);
- (6) Estimated direct labor dollars paid this reporting period (including sub-contractors);
- (7) Total payments (including sub-contractors);
- (8) Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each sub-contractor if different);
- (9) Estimated data collection cost;
- (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information);
- (11) Locations where contractor and sub-contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website);
- (12) Presence of deployment or contingency contract language; and
- (13) Number of contractor and sub-contractor employees deployed in theater this reporting period (by country).

As part of its submission, the contractor will also provide the estimated total cost (if any) incurred to comply with this reporting requirement. Reporting period will be the period of performance not to exceed 12 months ending September 30 of each government fiscal year and must be reported by 31 October of each calendar year.

[End of Clause]

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 6 of 26
Name of Offeror or Contractor: ASHLAND INC		

Scope of Work

C.1 SCOPE. This Statement of Work (SOW) defines the research effort required to identify, characterize, synthesize, and evaluate nanoparticles for use in military engine oils. Additionally, this effort will research and evaluate the dispersion method necessary to suspend the nanoparticles in oil.

C.1.1 Background. The nanoparticle program has been initiated in response to a Science and Technology need to improve military Petroleum, Oil, & Lubricants (POL) products. The nanoparticles will be researched to determine if and how nanoparticles can be added to fully-formulated military POL products (i.e. engine oil). The addition of nanoparticles to POL products is anticipated to improve a number of properties; for example increase thermal conductivity and heat transfer properties for better overall heat management and reduced peak operating temperatures, while reducing friction and wear, and enhancing fluid film protection. Fully formulated POL products with nanoparticles could ultimately contribute to make improvements in fuel efficiency, reducing the size of the cooling system (i.e., radiator) thus aiding in vehicle weight reductions and further helping to make vehicles more fuel efficient.

C.2 APPLICABLE DOCUMENTS. The following documents are applicable to this Statement of Work and attached appendices to the extent specified herein.

Department of Defense Specifications.

MIL-PRF-2104 Lubricating Oil, Internal Combustion Engine, Combat/Tactical Service

MIL-PRF-46167 Lubricating Oil, Internal Combustion Engine, Arctic

C.3 REQUIREMENTS.

C.3.1 General. The contractor, acting as an independent contractor and not as an agent of the Government, shall provide the necessary personnel, facilities, materials, and services to complete the effort described herein. The overall project is envisioned to encompass a period of 12 months. The work required by this contract shall be performed in accordance with Statement of Work.

The contractor shall research, select, and characterize specific nanoparticles, select and demonstrate the best method to disperse the nanoparticles in oil, and develop a nanoparticle concentrate to treat an engine oil with nanoparticles to demonstrate whether nanoparticles can improve performance in the areas of reduced friction, thermal stability and fuel consumption. The tasks involved are listed below in 3.2.

C.3.2 Detail Tasks.

C.3.2.1 Design, Engineering, Formulation and Test.

C.3.2.1.1 Selection, Synthesis, and Characterization of Nanoparticles. The contractor shall select and characterize up to three different nanoparticles to achieve increased heat transfer and/or reduce friction and wear.

C.3.2.1.1.1 Contractor shall create an index of all previously evaluated nanoparticles and summary of findings. This index shall be delivered not later than (NLT) 90 days after contract award (see DD 1423 Contract Data Requirements List (CDRL) A002).

C.3.2.1.1.2 Contractor shall identify the nanoparticles selected for this work and why they were chosen. This report shall be delivered NLT 90 days after contract award (see CDRL A002). Final selection of candidate nanoparticles shall be with the concurrence and approval of the Contracting Officers Representative (COR).

C.3.2.1.1.3 Contractor shall characterize the selected nanoparticles for chemical and physical properties before and after it has been blended with the lubricants.

C.3.2.1.2 Dispersant System Development. The contractor shall develop a particle concentrate dispersion system. The concentrates shall be tested for stability as a function of temperature and time, and diluted to evaluate their complete rheology in a reference lubricant selected with TARDEC.

C.3.2.1.2.1 The contractor shall provide an index of dispersion systems developed for the specific nanoparticles chosen in Section C.3.2.1.1. This index shall be delivered NLT 90 days after contract award or as agreed upon with the COR (see CDRL A002).

C.3.2.1.3 Formulation of prototype oils. The contractor shall formulate a prototype nanoparticle system which shall be

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 7 of 26
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Name of Offeror or Contractor: ASHLAND INC

blended into an agreed upon, or as specified by the COR, engine oil. The contractor shall evaluate the resulting oil to include but not limited to property characterizations, stability and shelf life, and environmental risks and impacts. A 1 gallon sample of the resulting oil and 1 pint of the nanoparticle concentrate shall be provided to TARDEC for evaluation. The contractor shall formulate the resulting oil for high temperature (140\°b0F ambient) and high loads.

C.3.2.1.4 Manufacturing. Contractor shall assess capabilities and requirements for full-scale production of a nanoparticle based lubricating oil, which shall include bulk manufacturing of the nanoparticle system.

C.3.2.2 Program Planning. The contractor shall provide program management, in accordance with the detail requirements below

C.3.2.2.1 Program Management. The contractor shall establish and maintain management operations that shall include the following areas:

- (a)Program Planning and Control,
- (b)Subcontractor Control,
- (c)Financial Management,
- (d)Data Management,
- (e)Management and Accountability for Government Furnished Equipment, and
- (f)Risk Management

The contractor shall develop and implement a Management Program that clearly defines how the nanoparticle program will be conducted and controlled. A task matrix keyed to the Work Breakdown Structure (WBS) shall be developed in sufficient detail to identify Contractor and subcontractor responsibilities. The contractor shall develop a financial management system to document and report funding allocations spent by the contractor and all subcontractors.

C.3.3 Deliverables

C.3.3.1 The contractor shall provide monthly status reports (to include cost schedule) to the government technical POC.

C.3.3.2 The contractor shall provide NLT 90 days after contract award; or a date to be agreed upon with the COR:

C.3.3.2.1 an index of all previously evaluated nanoparticles and summary of findings,

C.3.3.2.2 a list of the nanoparticles selected for this work and why they were chosen,

C.3.3.2.3 an index of dispersion systems developed for the specific nanoparticles chosen in Section 3.2.1.1.

C.3.3.3 The contractor shall provide NLT 60 days prior to the beginning of testing, or at a time to be mutually agreed upon with the COR, a comprehensive test plan . The Government shall have 30 days for review and comment. Final test plan shall be delivered NLT 15 days prior to start of testing. Test results shall be reported in a separate test report, due NLT 30 days after completion of testing.

C.3.3.4 The contractor shall provide a 1-gallon sample of the finished fluid formulated with nanoparticles and 1 pint of the nanoparticle concentrate.

C.3.3.5 The contractor shall provide a final report identifying the most promising nanoparticles for reducing thermal conductivity and enhancing friction and wear properties.

C.3.4 Meetings

C.3.4.1. Kick-Off Meeting. The Contractor shall plan and conduct a one (1) day kick-off meeting at TARDEC within thirty (30) days of Contract award. The Contractor shall coordinate this meeting with the COR. At the meeting, the Contractor shall explain its intended approach for accomplishing the Contract SOW.

C.3.4.2. Semi-Annual Meetings. The Contractor shall plan and conduct status meetings (every 6 months) with the COR for status updates.

C.3.4.3. Final Demonstration. The Contractor shall plan and conduct a one day final report presentation and meeting before contract expiration. At this meeting, the Contractor shall report the results of the prototype development and testing as defined in the Contract SOW at TARDEC or at a location agreed to by the COR.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 8 of 26
Name of Offeror or Contractor: ASHLAND INC		

*** END OF NARRATIVE C 0001 ***

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 9 of 26
Name of Offeror or Contractor: ASHLAND INC		

SECTION D - PACKAGING AND MARKING

	<u>Regulatory Cite</u>	<u>Title</u>	<u>Date</u>
D-1	252.211-7003	ITEM IDENTIFICATION AND VALUATION (Alternate I version dated April 2005)	JUN/2005

NOTE: Paragraph (a) comes after paragraphs (b) through (d) below. It was placed there because it's content is inconsequential as none of the definitions contained therein are used in this Alternate I version of this DFARS clause.

- (b) The Contractor shall deliver all items under a contract line, subline, or exhibit line item.
- (c) For each item delivered under a contract line, subline, or exhibit line item under paragraph (b) of this clause, in addition to the information provided as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the Contractor shall report the Governments unit acquisition cost.
- (d) The Contractor shall submit the information required by paragraph (c) of this clause in accordance with the data submission procedures at <http://www.acq.osd.mil/dpap/UID/DataSubmission.htm>.

(a) Definitions. As used in this clause--

"Automatic identification device" means a device, such as a reader or interrogator, used to retrieve data encoded on machine-readable media.

- Concatenated unique item identifier means
- (1) For items that are serialized within the enterprise identifier, the linking together of the unique identifier data elements in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier; or
 - (2) For items that are serialized within the original part, lot, or batch number, the linking together of the unique identifier data elements in order of the issuing agency code; enterprise identifier; original part, lot, or batch number; and serial number within the original part, lot, or batch number.

Data qualifier means a specified character (or string of characters) that immediately precedes a data field that defines the general category or intended use of the data that follows.

DoD recognized unique identification equivalent means a unique identification method that is in commercial use and has been recognized by DoD. All DoD recognized unique identification equivalents are listed at <http://www.acq.osd.mil/dpap/UID/equivalents.html>.

DoD unique item identification means a system of marking items delivered to DoD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number.

Enterprise means the entity (e.g., a manufacturer or vendor) responsible for assigning unique item identifiers to items.

Enterprise identifier means a code that is uniquely assigned to an enterprise by an issuing agency.

Governments unit acquisition cost means

- (1) For fixed-price type line, subline, or exhibit line items, the unit price identified in the contract at the time of delivery;
- (2) For cost-type or undefinitized line, subline, or exhibit line items, the Contractors estimated fully burdened unit cost to the Government at the time of delivery; and
- (3) For items produced under a time-and-materials contract, the Contractors estimated fully burdened unit cost to the Government at the time of delivery.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 10 of 26
---------------------------	--	----------------------

Name of Offeror or Contractor: ASHLAND INC

Issuing agency means an organization responsible for assigning a non-repeatable identifier to an enterprise (i.e., Dun & Bradstreets Data Universal Numbering System (DUNS) Number, Uniform Code Council (UCC) /EAN International (EAN) Company Prefix, or Defense Logistics Information System (DLIS) Commercial and Government Entity (CAGE) Code.

Issuing agency code means a code that designates the registration (or controlling) authority for the enterprise identifier.

Item means a single hardware article or a single unit formed by a grouping of subassemblies, components, or constituent parts.

Lot or batch number means an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions.

Machine-readable means an automatic identification technology media, such as bar codes, contact memory buttons, radio frequency identification, or optical memory cards.

Original part number means a combination of numbers or letters assigned by the enterprise at item creation to a class of items with the same form, fit, function, and interface.

Parent item means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent.

Serial number within the enterprise identifier means a combination of numbers, letters, or symbols assigned by the enterprise to an item that provides for the differentiation of that item from any other like and unlike item and is never used again within the enterprise.

Serial number within the part, lot, or batch number means a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item within a part, lot, or batch number assignment.

Serialization within the enterprise identifier means each item produced is assigned a serial number that is unique among all the tangible items produced by the enterprise and is never used again. The enterprise is responsible for ensuring unique serialization within the enterprise identifier.

Serialization within the part, lot, or batch number means each item of a particular part, lot, or batch number is assigned a unique serial number within that part, lot, or batch number assignment. The enterprise is responsible for ensuring unique serialization within the part, lot, or batch number within the enterprise identifier.

Unique item identifier means a set of data elements marked on items that is globally unique and unambiguous.

Unique item identifier type means a designator to indicate which method of uniquely identifying a part has been used. The current list of accepted unique item identifier types is maintained at http://www.acq.osd.mil/dpap/UID/uid_types.html

[End of Clause]

PACKAGING AND MARKING

D.1 Packaging and Packing

All items deliverable under this contract shall be packaged and packed in accordance with standard commercial practice in order to assure arrival at Destination without damage or loss.

D.2 Marking

All technical data deliverable under this contract shall be identified by the prime contractor, the name and address of the prime contractor, and where applicable, the name and address of the subcontractor who generated the data.

*** END OF NARRATIVE D 0001 ***

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 11 of 26
	PIIN/SIIN W56HZV-07-C-0211	MOD/AMD	
Name of Offeror or Contractor: ASHLAND INC			

SECTION E - INSPECTION AND ACCEPTANCE

	Regulatory Cite	Title	Date
E-1	52.246-9	INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM)	APR/1984

E.1 Inspection and Acceptance Point:

Inspection and acceptance of all deliverables under this contract shall be made at Destination by the Contracting Officer or his duly authorized representative. The determination that the deliverables are complete and conform to the requirements of the contract will be made by the Contracting Officer's Representative (COR), to assure the work and the results thereof are in accordance with the terms of the contract.

*** END OF NARRATIVE E 0001 ***

SECTION F - DELIVERIES OR PERFORMANCE

	Regulatory Cite	Title	Date
F-1	52.242-15	STOP WORK ORDER--(ALTERNATE I dated APR 1984)	AUG/1989
F-2	52.247-34	F.O.B. DESTINATION	NOV/1991

F.1 Period of Performance

F.1.1 All effort required under this contract, including delivery of the final technical report, shall be completed within twenty-four (24) months after contract award date.

F.2 Data Deliverables

F.2.1 Delivery of data set forth in the contract shall be in accordance with the Contract Data Requirements List, DD Form 1423.

F.3 Material / Hardware Deliverables

F.3.1 All materials / hardware, including the sample products, required to be delivered under the contract shall be delivered FOB Destination to the following address:

Commander
U.S. Army RDECOM-TARDEC
ATTN: Jill M. Tebbe
AMSRD-TAR-D/MS 110
6501 E. 11 Mile Road
Warren, MI 48397-5000

*** END OF NARRATIVE F 0001 ***

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 13 of 26
Name of Offeror or Contractor: ASHLAND INC		

SECTION G - CONTRACT ADMINISTRATION DATA

LINE	PRON/ AMS CD/ ITEM MIPR	OBLG ACRN STAT	ACCOUNTING CLASSIFICATION	JOB ORDER	ACCOUNTING STATION	OBLIGATED AMOUNT
0001AA	R362C353R3	AA 2	21 62040000066N6N7EP622601255Y S20113	62C353	W56HZV \$	833,543.00
	622601T2600					
					TOTAL \$	833,543.00

SERVICE NAME	TOTAL BY ACRN	ACCOUNTING CLASSIFICATION	ACCOUNTING STATION	OBLIGATED AMOUNT
Army	AA	21 62040000066N6N7EP622601255Y S20113	W56HZV	\$ 833,543.00
			TOTAL \$	833,543.00

ACRN	EDI ACCOUNTING CLASSIFICATION			
AA	21	060720400000	S20113	66N6N7E622601T2600255Y 62C353S20113 W56HZV
		<u>Regulatory Cite</u>		<u>Title</u>
G-1		252.232-7003		ELECTRONIC SUBMISSION OF PAYMENT REQUESTS
				<u>Date</u>
G-2		52.242-4016	COMMUNICATIONS	MAY/2000

Communications on technical matters pertaining to the contract shall be direct between the contractor and the Technical Representative. Communications for the Technical Representative shall be addressed to:

Name: Ms. Jill Tebbe
E-mail: jill.tebbe@us.army.mil
The Administrative Contracting Officer's (ACO) name and email address are also provided if known at this time:
ACO: DCMA - Dayton, DCMAA-ACOB
E-mail: TBD

Please see the appointment letters prepared at time of contract award for functions the Technical Representative and ACO will perform on this contract.

[End of Clause]

G-3	252.201-7000	CONTRACTING OFFICER'S REPRESENTATIVE	DEC/1991
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(a) Definition. Contracting Officer's Representative means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

[End of Clause]

G-4	252.204-7006	BILLING INSTRUCTIONS	OCT/2005
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When submitting a request for payment, the Contractor shall--

- (a) Identify the contract line item(s) on the payment request that reasonably reflect contract work performance; and
- (b) Separately identify a payment amount for each contract line item included in the payment request.

[End of Clause]

G-5	52.204-4011	PAYMENT INSTRUCTIONS FOR THE DEFENSE FINANCE AND ACCOUNTING SERVICE	OCT/2005
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CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 14 of 26
Name of Offeror or Contractor: ASHLAND INC		

(TACOM) (DFAS)

In accordance with DFARS PGI 204.7108, the contract shall be paid in accordance with DFARS PGI 204.7108(d)(5), line item specific by cancellation date.

[End of Clause]

G-6 52.227-4004 RELEASE OF INFORMATION OCT/2003
(TACOM)

The contractor shall ensure that he complies with the requirements of Chapter 5, page 22, paragraph 5-48, of AR 360-1, The Army Public Affairs Program, dated 15 Sep 2000, prior to contemplated release of any procurement information. Approval of the Contracting Officer is required prior to release of any such information. AR 360-1 may be found at http://www.usapa.army.mil/pdffiles/r360_1.pdf .

[End of clause]

G-7 52.232-4005 INVOICE INFORMATION REQUIREMENT JAN/1988
(TACOM)

On each payment request submitted, the Contractor shall identify each affected Contract Line Item Number (CLIN), sub-CLIN, and/or work directive, together with the related dollar amounts. This requirement does not diminish or restrict any other requirement of this contract.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 15 of 26
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Name of Offeror or Contractor: ASHLAND INC

SECTION H - SPECIAL CONTRACT REQUIREMENTS

	Regulatory Cite	Title	Date
H-1	252.204-7000	DISCLOSURE OF INFORMATION	DEC/1991
H-2	252.204-7002	PAYMENT FOR SUBLINE ITEMS NOT SEPARATELY PRICED	DEC/1991
H-3	252.225-7001	BUY AMERICAN ACT AND BALANCE OF PAYMENTS PROGRAM	JUN/2005
H-4	252.225-7002	QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS	APR/2003
H-5	252.225-7006	QUARTERLY REPORTING OF ACTUAL CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES	APR/2005
H-6	252.225-7013	DUTY-FREE ENTRY	JUN/2005
H-7	252.226-7001	UTILIZATION OF INDIAN ORGANIZATIONS, INDIAN-OWNED ECONOMIC ENTERPRISES, AND NATIVE HAWAIIAN SMALL BUSINESS CONCERNS	SEP/2004
H-8	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	SEP/1999
H-9	252.231-7000	SUPPLEMENTAL COST PRINCIPLES	DEC/1991
H-10	252.235-7011	FINAL SCIENTIFIC OR TECHNICAL REPORT	NOV/2004
H-11	252.246-7000	MATERIAL INSPECTION AND RECEIVING REPORT	MAR/2003
H-12	252.246-7001	WARRANTY OF DATA	DEC/1991
H-13	52.204-4005	REQUIRED USE OF ELECTRONIC CONTRACTING	SEP/2004

(a) All contract awards, modifications and delivery orders issued by TACOM will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions/clauses that appear "by reference", meaning only clause titles and regulation site are listed; their full texts can be found at the website <http://farsite.hill.af.mil/>

(b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) Central Contractor Registration (CCR). The CCR registration process may be done electronically at the World Wide Web (WWW) site: <http://www.ccr.gov/>. (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)

(c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate TACOM webpage:

Warren: <http://contracting.tacom.army.mil/awd.htm>
Rock Island: <https://aais.ria.army.mil/AAIS/AWDINFO/index.htm>
Picatinny: <http://procnet.pica.army.mil/dbi/DynCBD/award.cfm>
Red River Army Depot: <http://www.redriver.army.mil/contractingframes/RecentAwards.DPD.cfm>
Anniston Army Depot: <http://www.anadprocnet.army.mil/>

(d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.

(1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Training Partner Profile is contained in the basic CCR registration form and includes portions of the registration form which are titled "Optional".

(2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at <http://www.acq.osd.mil/dpap/ebiz/VANs.htm>. If your VAN is later removed from the official list, or if you voluntarily drop your initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

(e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Please go to the following webpage for detailed information about submitting your offer electronically: <http://contracting.tacom.army.mil/ebidnotice.htm>

(f) Additional information can be obtained by sending a message to: acqcenweb@tacom.army.mil or by calling (586) 574-7059.

[End of Clause]

H-14	52.216-4008	STATUS OF FUNDS ON COST REIMBURSEMENT CONTRACTS/CLINS (TACOM)	JUN/1989
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(a) The Contractor shall review the funding as it relates to work performed on the cost-reimbursement Contract Line Item Numbers

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 16 of 26
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Name of Offeror or Contractor: ASHLAND INC

(CLINs) under this contract and shall provide to the Procuring Contracting Officer (PCO) a written determination of what, if any, funds are excess to requirements (leaving a reasonable amount for final overhead rate negotiations and other reasonably predicted requirements) and are available for deobligation. This review shall be coordinated with the Administrative Contracting Officer (ACO), and the written determination shall be accomplished within 120 days of completion of performance under the CLIN. The report shall be prepared in terms of dollars available per Purchase Request Order Number (PRON), unless requested otherwise by the PCO.

(b) This report may be requested in writing by the PCO on additional occasions during the course of performance of work on cost-reimbursable CLINs contained in this contract. On such occasions, the written report shall be provided to the PCO within 14 days of Contractor receipt of the written request.

(End of clause)

H-15 52.246-4026 LOCAL ADDRESSES FOR DD FORM 250 AND WAWF RECEIVING REPORTS SEP/2006
(TACOM)

(a) The Contractor may use either the Material Inspection and Receiving Report (DD 250) or Wide Area Workflow (WAWF) to process receiving reports for inspection, acceptance, and payment. Use only one method per contract; not both.

(b) If you are using the Material Inspection and Receiving Report (DD 250), use one of the following methods to send each DD 250 pertaining to this contract to us:

(1) Our first preference is for you to use electronic mail (e-mail), using the following e-mail address: DD250@tacom.army.mil

(2) Our second preference is for you to use data facsimile (datafax) transmission, using this fax number:

(586) 574-7788 and use "DD250 mailbox" in the "to:" block of your fax cover or header sheet.

In either method, do not mix DD250s from more than one contract in a single transmission. That is, you may submit multiple DD250s in a single transmission, but they must all be against the same contract. These copies meet the requirements for the Purchasing Office copy and the Army Inventory Control Manager copy listed in tables 1 and 2 of DFARS Appendix F. The DD250 form may be found, in three different formats, on the World Wide Web at <http://www.dtic.mil/whs/directives/infomgt/forms/forminfo/forminfo2126.html>

(c) If you are using Wide Area Workflow (WAWF) instead of DD 250s, we may require copies of the WAWF Receiving Report, Bills of Lading, or other documentation to resolve delinquencies, payment issues, or other administrative issues. If this documentation is requested, use the same email address or fax number shown in paragraph (b) above to submit the information. No copies of the WAWF Receiving Report are required unless specifically requested by the PCO, buyer, or other appropriate government official.

[End of Clause]

H.1 SMALL BUSINESS SUBCONTRACTING PLAN -- INCORPORATION BY REFERENCE

Valvoline's Small Business Subcontracting Plan, dated 8 March 2007, is hereby incorporated by reference, and made a part hereof as if set forth in full.

*** END OF NARRATIVE H 0001 ***

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 17 of 26
	PIIN/SIIN W56HZV-07-C-0211	MOD/AMD	
Name of Offeror or Contractor: ASHLAND INC			

SECTION I - CONTRACT CLAUSES

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: <http://farsite.hill.af.mil/>

[End of Clause]

	Regulatory Cite	Title	Date
I-1	52.202-1	DEFINITIONS	JUL/2004
I-2	52.203-3	GRATUITIES	APR/1984
I-3	52.203-5	COVENANT AGAINST CONTINGENT FEES	APR/1984
I-4	52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEP/2006
I-5	52.203-7	ANTI-KICKBACK PROCEDURES	JUL/1995
I-6	52.203-8	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-7	52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN/1997
I-8	52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	SEP/2005
I-9	52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	AUG/2000
I-10	52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	SEP/2006
I-11	52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS	SEP/1990
I-12	52.215-2	AUDIT AND RECORDS - NEGOTIATIONS	JUN/1999
I-13	52.215-8	ORDER OF PRECEDENCE--UNIFORM CONTRACT FORMAT	OCT/1997
I-14	52.215-10	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA	OCT/1997
I-15	52.215-12	SUBCONTRACTOR COST OR PRICING DATA	OCT/1997
I-16	52.215-14	INTEGRITY OF UNIT PRICES (ALTERNATE I, (OCT 1997))	OCT/1997
I-17	52.215-15	PENSION ADJUSTMENTS AND ASSET REVERSIONS	OCT/2004
I-18	52.215-18	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS	JUL/2005
I-19	52.215-19	NOTIFICATION OF OWNERSHIP CHANGES	OCT/1997
I-20	52.216-7	ALLOWABLE COST AND PAYMENT	DEC/2002
I-21	52.216-8	FIXED FEE	MAR/1997
I-22	52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	MAY/2004
I-23	52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN	SEP/2006
I-24	52.219-9	SMALL BUSINESS SUBCONTRACTING PLAN (Alternate II dated October 2001)	JUL/2005
I-25	52.219-16	LIQUIDATED DAMAGES - SUBCONTRACTING PLAN	JAN/1999
I-26	52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB/1997
I-27	52.222-21	PROHIBITION OF SEGREGATED FACILITIES	FEB/1999
I-28	52.222-26	EQUAL OPPORTUNITY	APR/2002
I-29	52.222-35	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	SEP/2006
I-30	52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	JUN/1998
I-31	52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS	SEP/2006
I-32	52.223-3	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA	JAN/1997
I-33	52.223-6	DRUG FREE WORKPLACE	MAY/2001
I-34	52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	FEB/2006
I-35	52.226-1	UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES	JUN/2000
I-36	52.227-1	AUTHORIZATION AND CONSENT (ALTERNATE I dated April 1984)	JUL/1995
I-37	52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	AUG/1996
I-38	52.227-12	PATENT RIGHTS--RETENTION BY THE CONTRACTOR (LONG FORM)	JAN/1997
I-39	52.228-7	INSURANCE--LIABILITY TO THIRD PERSONS	MAR/1996
I-40	52.230-2	COST ACCOUNTING STANDARDS	APR/1998
I-41	52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS	APR/2005
I-42	52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS	APR/1984
I-43	52.232-17	INTEREST	JUN/1996
I-44	52.232-20	LIMITATION OF COST	APR/1984
I-45	52.232-25	PROMPT PAYMENT	OCT/2003
I-46	52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER--CENTRAL CONTRACTOR REGISTRATION	OCT/2003
I-47	52.232-23 (ALT 1)	ASSIGNMENT OF CLAIMS (Alternate I version dated April 1984)	JAN/1986
I-48	52.233-1	DISPUTES	JUL/2002

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 18 of 26
	PIIN/SIIN W56HZV-07-C-0211	MOD/AMD	
Name of Offeror or Contractor: ASHLAND INC			

	Regulatory Cite	Title	Date
I-49	52.233-3	PROTEST AFTER AWARD -- (ALTERNATE I, dated JUN 1985)	AUG/1996
I-50	52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	OCT/2004
I-51	52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR/1984
I-52	52.242-3	PENALTIES FOR UNALLOWABLE COSTS	MAY/2001
I-53	52.242-13	BANKRUPTCY	JUL/1995
I-54	52.243-2	CHANGES--COST-REIMBURSEMENT (ALTERNATE V, dated April 1984))	AUG/1987
I-55	52.244-2	SUBCONTRACTS	AUG/1998
I-56	52.244-5	COMPETITION IN SUBCONTRACTING	DEC/1996
I-57	52.245-5	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL, OR LABOR-HOUR CONTRACTS) (Deviation, per DAR Tracking Number 99-00008, 13 July 99)	MAY/2004
I-58	52.246-25	LIMITATION OF LIABILITY--SERVICES	FEB/1997
I-59	52.249-6	TERMINATION (COST-REIMBURSEMENT)	MAY/2004
I-60	52.249-14	EXCUSABLE DELAYS	APR/1984
I-61	52.253-1	COMPUTER GENERATED FORMS	JAN/1991
I-62	252.203-7001	PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE CONTRACT-RELATED FELONIES	DEC/2004
I-63	252.204-7003	CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT	APR/1992
I-64	252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY per DoD interim rule, Federal Register 27 Mar 98	MAR/1998
I-65	252.211-7005	SUBSTITUTIONS FOR MILITARY OR FEDERAL SPECIFICATIONS AND STANDARDS	NOV/2005
I-66	252.215-7000	PRICING ADJUSTMENTS	DEC/1991
I-67	252.215-7002	COST ESTIMATING SYSTEM REQUIREMENTS	OCT/1998
I-68	252.219-7003	SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (DOD CONTRACTS)	APR/1996
I-69	252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES	JUN/2004
I-70	252.225-7014	PREFERENCE FOR DOMESTIC SPECIALTY METALS (Alternate I dated April 2003)	JUN/2005
I-71	252.225-7016	RESTRICTION ON ACQUISITION OF BALL AND ROLLER BEARINGS	MAR/2006
I-72	252.225-7031	SECONDARY ARAB BOYCOTT OF ISRAEL	JUN/2005
I-73	252.227-7013	RIGHTS IN TECHNICAL DATA --NONCOMMERCIAL ITEMS	NOV/1995
I-74	252.227-7016	RIGHTS IN BID OR PROPOSAL INFORMATION	JUN/1995
I-75	252.227-7017	IDENTIFICATION AND ASSERTION OF USE, RELEASE, OR DISCLOSURE RESTRICTIONS	JUN/1995
I-76	252.227-7030	TECHNICAL DATA--WITHHOLDING OF PAYMENT	MAR/2000
I-77	252.227-7037	VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA	SEP/1999
I-78	252.232-7010	LEVIES ON CONTRACT PAYMENTS	SEP/2005
I-79	252.242-7004	MATERIAL MANAGEMENT AND ACCOUNTING SYSTEM	NOV/2005
I-80	252.243-7002	REQUESTS FOR EQUITABLE ADJUSTMENT	MAR/1998
I-81	252.244-7000	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DoD CONTRACTS)	NOV/2005
I-82	252.247-7023	TRANSPORTATION OF SUPPLIES BY SEA	MAY/2002
I-83	52.222-2	PAYMENT FOR OVERTIME PREMIUMS	JUL/1990

(a) The use of overtime is authorized under this contract if the overtime premium cost does not exceed ZERO DOLLARS (\$0.00) or the overtime premium is paid for work--

(1) Necessary to cope with emergencies such as those resulting from accidents, natural disasters, breakdown of production equipment, or occasional production bottlenecks of a sporadic nature;

(2) By indirect-labor employees such as those performing duties in connection with administration, protection, transportation, maintenance, standby plant protection, operation of utilities, or accounting;

(3) To perform tests, industrial processes, laboratory procedures, loading or unloading of transportation conveyances, and operations in flight or afloat that are continuous in nature and cannot reasonably be interrupted or completed otherwise; or

(4) That will result in lower overall costs to the Government.

(b) Any request for estimated overtime premiums that exceeds the amount specified above shall include all estimated overtime for contract completion and shall--

(1) Identify the work unit; e.g., department or section in which the requested overtime will be used, together with present workload, staffing, and other data of the affected unit sufficient to permit the Contracting Officer to evaluate the necessity for the overtime;

(2) Demonstrate the effect that denial of the request will have on the contract delivery or performance schedule;

(3) Identify the extent to which approval of overtime would affect the performance or payments in connection with other

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 19 of 26
Name of Offeror or Contractor: ASHLAND INC		

Government contracts, together with identification of each affected contract; and

(4) Provide reasons why the required work cannot be performed by using multishift operations or by employing additional personnel.

(End of clause)

I-84 52.223-7 NOTICE OF RADIOACTIVE MATERIALS JAN/1997

(a) The Contractor shall notify the Contracting Officer or designee, in writing 60 days prior to the delivery of, or prior to completion of any servicing required by this contract of, items containing either (1) radioactive material requiring specific licensing under the regulations issued pursuant to the Atomic Energy Act of 1954, as amended, as set forth in Title 10 of the Code of Federal Regulations, in effect on the date of this contract, or (2) other radioactive material not requiring specific licensing in which the specific activity is greater than 0.002 microcuries per gram or the activity per item equals or exceeds 0.01 microcuries. Such notice shall specify the part or parts of the items which contain radioactive materials, a description of the materials, the name and activity of the isotope, the manufacturer of the materials, and any other information known to the Contractor which will put users of the items on notice as to the hazards involved (OMB No. 9000-0107).

(b) If there has been no change affecting the quantity of activity, or the characteristics and composition of the radioactive material from deliveries under this contract or prior contracts the Contractor may request that the Contracting Officer or designee waive the notice requirement in paragraph (a) of this clause. Any such request shall-

(1) Be submitted in writing;

(2) State that the quantity of activity, characteristics, and composition of the radioactive material have not changed; and

(3) Cite the contract number on which the prior notification was submitted and the contracting office to which it was submitted.

(c) All items, parts, or subassemblies which contain radioactive materials in which the specific activity is greater than 0.002 microcuries per gram or activity per item equals or exceeds 0.01 microcuries, and all containers in which such items, parts or subassemblies are delivered to the Government shall be clearly marked and labeled as required by the latest revision of MIL-STD 129 in effect on the date of the contract.

(d) This clause, including this paragraph (d), shall be inserted in all subcontracts for radioactive materials meeting the criteria in paragraph (a) of this clause.

[End of Clause]

I-85 52.204-7 CENTRAL CONTRACTOR REGISTRATION JUL/2006

(a) Definitions. As used in this clause--

"Central Contractor Registration (CCR) database" means the primary Government repository for contractor information required for the conduct of business with the Government.

"Commercial and Government Entity (CAGE) code" means-

(1) A code assigned by the Defense Logistics Information Service (DLIS) to identify a commercial or Government entity; or

(2) A code assigned by a member of the North Atlantic Treaty Organization that DLIS records and maintains in the CAGE master file. This type of code is known as an "NCAGE code."

"Data Universal Numbering System (DUNS) number" means the 9-digit number assigned by Dun and Bradstreet, Inc. (D&B) to identify unique business entities.

"Data Universal Numbering System +4 (DUNS+4) number" means the DUNS number assigned by D&B plus a 4-character suffix that may be assigned by a business concern. (D&B has no affiliation with this 4-character suffix.) This 4-character suffix may be assigned at the discretion of the business concern to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11 of the Federal Acquisition Regulation) for the same parent concern.

"Registered in the CCR database" means that-

(1) The Contractor has entered all mandatory information, including the DUNS number or the DUNS+4 number, into the CCR

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 20 of 26
Name of Offeror or Contractor: ASHLAND INC		

database;

(2) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS), and has marked the record ``Active''. The Contractor will be required to provide consent for TIN validation to the Government as a part of the CCR registration process.

(b)

(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the CCR database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation DUNS or DUNS+4 followed by the DUNS or DUNS+4 number that identifies the offerors name and address exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at <http://www.dnb.com/> ; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the CCR database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) The Contractor is responsible for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Governments reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(1)

(i) If a Contractor has legally changed its business name, doing business as name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business days written notification of its intention to:

CONTINUATION SHEET	Reference No. of Document Being Continued PIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 21 of 26
Name of Offeror or Contractor: ASHLAND INC		

(A) Change the name in the CCR database;

(B) Comply with the requirements of Subpart 42.12 of the FAR;

(C) Agree in writing to the timeline and procedures specified by the responsible Contracting Officer.
The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the Suspension of Payment paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractors CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the Suspension of payment paragraph of the EFT clause of this contract.

(g) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the Internet at <http://www.ccr.gov/> or by calling 1-888-227-2423, or 269-961-5757.

[End of Clause]

I-86 52.222-39 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES DEC/2004

(a) Definition. As used in this clause--

United States means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 22 of 26
Name of Offeror or Contractor: ASHLAND INC		

To locate the nearest NLRB office, see NLRB's website at <http://www.nlr.gov> .

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to--

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that--

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order; or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors. The Contractor shall--

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at <http://www.olms.dol.gov>; or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR part 470, Subpart B--Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

[End of Clause]

I-87 52.223-11 OZONE-DEPLETING SUBSTANCES

MAY/2001

(a) Definition. Ozone-depleting substance, as used in this clause, means any substance the Environmental Protection Agency designates in 40 CFR part 82 as--

(1) Class I, including, but not limited to, chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or

(2) Class II, including but not limited to, hydrochlorofluorocarbons.

(b) The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 23 of 26
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Name of Offeror or Contractor: ASHLAND INC

extent required by 42 U.S.C. 7671j(b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

WARNING: Contains (or manufactured with, if applicable) _____ * _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere.

*The Contractor shall insert the name of the substance(s).

[End of Clause]

I-88 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS SEP/2006

(a) Definitions. As used in this clause--

(1) "Commercial item" has the meaning contained in Federal Acquisition Regulation 2.101, Definitions.

(2) "Subcontract," as used in this clause, includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)

(1) The contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (May 2004)(15U.S.C. 637(d)(2) and (3)), in all subcontracts that offer subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$550,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (APR 2002)(E.O. 11246);

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans (SEP 2006) (38 U.S.C. 4212(a));

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998)(29 U.S.C. 793);

(v) 52.222-39, Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004) (E.O. 13201). Flow down as required in accordance with paragraph (g) of FAR clause 52.222-39).

(vi) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (FEB 2006) (46 U.S.C. Appx 1241 and 10 U.S.C. 2631) (flow down required in accordance with paragraph (d) of FAR clause 52.247-64).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimum number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

[End of Clause]

I-89 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES APR/1984

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the date of the clause.

(b) The use in this solicitation or contract of any DoD FAR Supplement (DFARS) (48 CFR 2) clause with an authorized deviation is indicated by the addition of (DEVIATION) after the name of the regulation.

[End of Clause]

I-90 252.223-7001 HAZARD WARNING LABELS DEC/1991

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 24 of 26
Name of Offeror or Contractor: ASHLAND INC		

(a) Hazardous material, as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labelling requirements of one of the following statutes:

- (1) Federal Insecticide, Fungicide and Rodenticide Act;
- (2) Federal Food, Drug and Cosmetics Act;
- (3) Consumer Product Safety Act;
- (4) Federal Hazardous Substances Act; or
- (5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labelled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

<u>MATERIAL (If None, Insert None.)</u>	<u>ACT</u>

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

[End of Clause]

I-91 252.225-7015 RESTRICTION ON ACQUISITION OF HAND OR MEASURING TOOLS JUN/2005

Hand or measuring tools delivered under this contract shall be produced in the United States or its outlying areas.

[End of Clause]

I-92 52.204-4009 MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC COMMUNICATION MAR/2005
(TACOM)

(a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the website:
<http://contracting.tacom.army.mil/ebidnotice.htm>

(b) This shall include all written unclassified communications between the Government and the Contractor except contract awards and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.

(c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must be sent from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).

(d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and technical personnel assigned to this contract.

CONTINUATION SHEET	Reference No. of Document Being Continued PIIN/SIIN W56HZV-07-C-0211 MOD/AMD	Page 25 of 26
Name of Offeror or Contractor: ASHLAND INC		

(e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

[End of Clause]

I-93 52.219-4070 PILOT MENTOR-PROTEGE PROGRAM APR/2006

- (a) The Pilot Mentor-Protege Program does not apply to small business concerns.
- (b) Utilization of the Pilot Mentor-Protege Program (hereafter referred to as the Program) is encouraged. Under the Program, eligible companies approved as mentor firms enter into a mentor-protege agreement with eligible protege firms. The goal of the program is to provide appropriate developmental assistance to enhance the capabilities of the protege firm. The Mentor firm may be eligible for cost reimbursement or credit against their applicable subcontracting goals.
- (c) Mentor firms are encouraged to identify and select concerns that are defined as emerging small business concerns, small disadvantaged business, women-owned small business, HUBZone small business, service-disabled veteran-owned small business, veteran-owned small business or an eligible entity employing the severely disabled.
- (d) Full details of the program are located at [http://www.acq.osd.mil/sadbu/mentor protege/](http://www.acq.osd.mil/sadbu/mentor%20protege/), <http://sellingtoarmy.info/>, DFARS Appendix I, and DFARS Subpart 219.71, "Pilot Mentor-Protege Program."
- (e) For additional questions after reviewing the information provided, contact the Office of Small Business Programs serving your area.

[End of Clause]

CONTINUATION SHEET	Reference No. of Document Being Continued		Page 26 of 26
	PIIN/SIIN	W56HZV-07-C-0211	
Name of Offeror or Contractor: ASHLAND INC			

SECTION J - LIST OF ATTACHMENTS

<u>List of</u> <u>Addenda</u>	<u>Title</u>	<u>Date</u>	<u>Number</u> <u>of Pages</u>	<u>Transmitted By</u>
Exhibit A	CONTRACT DATA REQUIREMENTS LIST (CDRL) DD 1423			
Attachment 001	INSTRUCTIONS FOR SF 298			
Attachment 002	DID-MISC-81612A (DELETED)			

CONTRACT DATA REQUIREMENT LIST

Form Approval OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 440 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either these addresses. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.: D. SYSTEM/ITEM.....: Research & Development - Nanofluids
B. EXHIBIT : A E. CONTRACT/PR NO.:W56HZV-07-C-0211
C. CATEGORY.....: F. CONTRACTOR.....:Valvoline, Inc

1. DATA ITEM NO.: A001
2. TITLE OF DATA ITEM : Contractor's Progress Status and Management Report
3. SUBTITLE:
4. AUTHORITY: DI-MGMT-80227(T) (see 16a. below)
5. CONTRACT REFERENCE: C.3.3.1
6. REQUIRING OFFICE .: AMSRD-TAR-D / MS 110 9. DIST. STATEMENT REQUIRED: 12. DATE OF FIRST SUB: 60 DAC
7. DD250 REQ: LT 10. FREQUENCY : Monthly 13. DATE OF SUBS. SUB:
8. APP CODE: N/A 11. AS OF DATE:

14. DISTRIBUTION ADDRESSEES: SUBMIT REPORTS ELECTRONICALLY TO THE E-MAIL ADDRESSES SHOWN IMMEDIATELY BELOW:

JILL M. TEBBE, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: tebbej@TACOM.ARMY.MIL
DAVID E. MCCRIGHT, CONTRACT SPECIALIST, E-MAIL: mccrighd@TACOM.ARMY..MIL
ADMINISTRATIVE CONTRACTING OFFICER: DCMA-Dayton, DCMAA-ACOB E-MAIL: TBD
15. TOTAL:

16. REMARKS:

a. DI-MGMT-80227 is tailored by deleting 10.2, 10.3(j) 10.3(k), and 10.3(l).
17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

1. DATA ITEM NO. A002
2. TITLE OF DATA ITEM: Index and Summary
3. SUBTITLE:
4. AUTHORITY: 5. CONTRACT REFERENCE: C.3.3.2
6. REQUIRING OFFICE: AMSTA-TR-D/MS 110
7. DD 250 REQ: LT 8. APP CODE: 9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: 11. AS OF DATE:
12. DATE OF FIRST SUBMISSION: SEE BLK 16 13. DATE OF SUBS. SEE BLK 16
14. DISTRIBUTION/ A. ADDRESSEE B. COPIES DRAFT / FINAL
JILL M. TEBBE, CONTRACTING OFFICER'S REPRESENTATIVE, 1 / 1
15. TOTAL: 1 / 1
16. REMARKS 90 days after contract award provide, in contractor format, an index of all previously evaluated nanoparticles and summary of findings, a list of the nanoparticles selected for this work and why they were chosen, an index of dispersion systems developed for the specific nanoparticles chosen

1. DATA ITEM NO. A003
2. TITLE OF DATA ITEM: Test Plan
3. SUBTITLE:
4. AUTHORITY: DI-NDTI-80566 5. CONTRACT REFERENCE: C.3.3.3
6. REQUIRING OFFICE: AMSTA-TR-D/MS110
7. DD 250 REQ: LT 8. APP CODE: 9. DIST. STATEMENT REQUIRED:
10. FREQUENCY: ASREQ 11. AS OF DATE:

12. DATE OF FIRST SUBMISSION: SEE BLK 16 13. DATE OF SUBS. SEE BLK 16
14. DISTRIBUTION/ A. ADDRESSEE B. COPIES DRAFT / FINAL
JILL M. TEBBE, CONTRACTING OFFICER'S REPRESENTATIVE, 1 / 1
15. TOTAL: 1 / 1
16. REMARKS The Test Plan shall be electronically delivered (email or CD) in an editable and printable digital format.
Draft Test Plan delivered 60 days prior to Test and Demonstration; Government to review and provide comments 30 days after receipt of
draft. FINAL Test Plan delivered 15 days after receipt of Government comment

1. DATA ITEM NO.: A004
2. TITLE OF DATA ITEM : SCIENTIFIC AND TECHNICAL REPORT
3. SUBTITLE: DRAFT/FINAL TECHNICAL REPORT

4. AUTHORITY: DI-MISC-80711A(T) (see 16a. below)
5. CONTRACT REFERENCE: C.3.3.5
6. REQUIRING OFFICE .: AMSRD-TAR-D / MS 110 9. DIST. STATEMENT REQUIRED: 12. DATE OF FIRST SUB: SEE ITEM 16
7. DD250 REQ: DD 10. FREQUENCY : SEE ITEM 16 13. DATE OF SUBS. SUB: SEE ITEM 16
8. APP CODE: A 11. AS OF DATE:

14. DISTRIBUTION ADDRESSEES: SUBMIT REPORTS ELECTRONICALLY TO THE E-MAIL ADDRESSES SHOWN IMMEDIATELY BELOW:
DRAFT/FINAL

JILL M. TEBBE, CONTRACTING OFFICER'S REPRESENTATIVE, E-MAIL: tebbej@TACOM.ARMY.MIL 1/1
DAVID E. MCCRIGHT, CONTRACT SPECIALIST, E-MAIL: mccrighd@TACOM.ARMY..MIL 0/1
ADMINISTRATIVE CONTRACTING OFFICER: DCMA-Dayton, DCMAA-ACOB E-MAIL: TBD 0/1
15. TOTAL:

16. REMARKS:

- a. DI-MISC-80711A is tailored by deleting 10.2.
- b. The Draft of the Final Technical Report (C.2.2) shall be delivered 22 months after date of contract award. The Government will review and respond within 30 days of receipt. The contractor shall submit the Final Technical Report within 30 days after receipt of draft comments/approval.

17. PRICE GROUP: 18. ESTIMATED TOTAL PRICE:

***** THE FOLLOWING INSTRUCTION APPLIES TO ALL REPORTS DELIVERABLE UNDER THE CONTRACT *****

Prepare the reports in Contractor format. Submit the reports using any of the following
electronic formats:

(1) Files readable using these Microsoft* Office XP or Microsoft* Office 2002 & lower Products: Word, Excel, PowerPoint, or Access. Spreadsheets must be sent in a file format that includes all formulae, macro and format information. Print or scan images of spreadsheets are not acceptable. Please see security note below for caution regarding use of macros.

(2) Files in Adobe PDF (Portable Document Format). When scanning documents, scanner should be set to 200 dots per inch.

(3) Files in HTML (Hypertext Markup Language) Format. HTML documents must not contain active links to Internet websites or web pages for reference information. All linked information must be contained within your electronic report, and be accessible offline.

(4) Other electronic formats. Before preparing your report in any other electronic format, please e-mail the COR, with an e-mail copy-furnished to amsta-idq@tacom.army.mil, to obtain a decision as to the format's acceptability. This e-mail must be received by the COR not later than ten (10) calendar days before the draft report's due date. All alternate methods must be at no cost to the Government.

(5) Please note that we can no longer accept .zip files due to increasing security concerns.

NOTE. Macros: The virus scanning software used by our e-mail systems cannot always distinguish a macro from a virus. Therefore, sending a macro embedded in an e-mail message or an e-mail attachment may cause the e-mail report to be quarantined.

d. Acceptable media: The Contractor shall submit reports via e-mail. If e-mail is not workable, another acceptable media is a 650 megabyte CD ROM. Identify the software application and version used to create each file submitted.

(1) E-MAIL. Maximum size of each e-mail message shall be three and one-half (3.5) megabytes. Previously "zipped" files were accepted, but due to security concerns these zipped attachments cannot be received through our mail system. You may use multiple e-mail messages if necessary, however, you must annotate the subject lines in this manner: "Message 1 of 3, 2 of 3, 3 of 3."

(2) 650 MEGABYTE CD ROM to be delivered via U.S. Mail or other carrier. The Contractor shall label all submitted disks with the Contract number, the Contractor's name and address, and a contact's phone number. Exterior mailing envelopes containing disks must be addressed to the following address:

U.S. Army TACOM Life Cycle Management Command (TACOM LCMC)
Attn: Jill M. Tebbe
AMSRD-TAR-D/ MS 110
6501 East 11 Mile Road
Warren, MI 48397-5000

NOTE: Please select only one type of electronic media to transmit each report. For instance, do not submit a report via e-mail and CD-ROM.

* Registered Trademark

INSTRUCTIONS FOR COMPLETING SF 298

1. REPORT DATE. Full publication date, including day, month, if available. Must cite at least the year, e.g. 30-06-1998; xx-06-1998; xx-xx-1998.
2. REPORT TYPE. State the type of report, such as final, technical, interim, memorandum, master's thesis, progress, quarterly, research, special, group study, etc.
3. DATES COVERED. Indicate the time during which the work was performed and the report was written, e.g., Jun 2001 - Jun 2002; 1-10 Jun 2003; May - Nov 2004; Nov 2002.
4. TITLE. Enter title and subtitle with volume number and part number, if applicable. On classified documents, enter the title classification in parentheses.
- 5a. CONTRACT NUMBER. Enter the contract number as it appears in the report, e.g. W56HZV-06-C-0001.
- 5b. GRANT NUMBER. Enter all grant numbers (if applicable) as they appear in the report, e.g. AFOSR-82-1234.
- 5c. PROGRAM ELEMENT NUMBER. Enter all program element numbers (if applicable) as they appear in the report, e.g. 61101A.
- 5d. PROJECT NUMBER. Enter all project numbers (if applicable) as they appear in the report, e.g. 1F665702D1257; ILIR.
- 5e. TASK NUMBER. Enter all task numbers (if applicable) as they appear in the report, e.g. 05; RF0330201; T4112.
- 5f. WORK UNIT NUMBER. Enter all work unit numbers (if applicable) as they appear in the report, e.g. 001; FAPL30480105.
6. AUTHOR(S). Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. The form of entry is the last name, first name, middle initial, and additional qualifiers separated by commas, e.g. Smith, Richard, J, Jr.
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES). Leave Blank
8. PERFORMING ORGANIZATION REPORT NUMBER. Leave Blank
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES). Enter "US Army Tank-automotive Research Development & Engineering Center, Warren, Michigan 48397-5000".
10. SPONSOR/MONITOR'S ACRONYM(S). Enter "TARDEC".
11. SPONSOR/MONITOR'S REPORT NUMBER(S). Enter report number as assigned by the sponsoring/monitoring agency, if available/known, e.g. BRL-TR-829; -215.
12. DISTRIBUTION/AVAILABILITY STATEMENT. Use agency-mandated availability statements to indicate the public availability or distribution limitations of the report (refer to instructions on the DD Form 1423). If additional limitations/ restrictions or special markings are indicated, follow agency authorization procedures, e.g. RD/FRD, PROPIN, ITAR, etc. Include copyright information.
13. SUPPLEMENTARY NOTES. Enter information not included elsewhere such as: prepared in cooperation with; translation of; report supersedes; old edition number, etc.
14. ABSTRACT. A brief (approximately 200 words) factual summary of the most significant information.
15. SUBJECT TERMS. Key words or phrases identifying major concepts in the report.
16. SECURITY CLASSIFICATION. Enter security classification in accordance with security classification regulations, e.g. U, C, S, etc. If this form contains classified information, stamp classification level on the top and bottom of this page.
17. LIMITATION OF ABSTRACT. This block must be completed to assign a distribution limitation to the abstract. Enter UU (Unclassified Unlimited) or SAR (Same as Report). An entry in this block is necessary if the abstract is to be limited.

*****DELETED*****